TO: File (CIWQS PLACE ID No. 768945)

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DATE: February 15, 2019, 2019

SUBJECT: **Proposed Changes to Lower Calera Creek Element of the Lower Berryessa Creek–Lower Calera Creek Flood Improvements Project, City of Milpitas, Santa Clara County**

The Water Board issued a water quality certification (Certification) to the Santa Clara Valley Water District (District) for the Lower Berryessa Creek-Lower Calera Creek Flood Improvement Project (Project) on October 10, 2014 (CIWQS Place ID No. 768945) (Certification). The District proposes to modify the Lower Calera Creek element of the Project, and accordingly, prepared an addendum to the environmental impact report (SCH# 2007092084). The proposed modifications would improve in-channel habitat relative to the initial Project. In-channel habitat would be improved by creating a vegetated soft-bottom channel with a minimum of one foot of sediment over the concrete lining. The existing design did not include the one foot of soft bottom built into the project. Before determining whether to amend the Certification to authorize the proposed modifications, the Executive Officer will consider public comments. The proposed modifications within the Water Board's authority are listed in the table below, followed by a rendering of one of the floodwalls.

Proposed Changes to Lower Calera Creek Project Element

	Original Plan	Redesign
Reach A		
1)	Retain the existing concrete U-frame channel and raise the height of the walls by four feet (ft) to increase flow conveyance capacity.	• The existing concrete U-frame channel would be removed and reconstructed with specified taller walls. • Concrete fill would increase by 2,215 cubic yards (CY). • The new concrete U-frame channel bed's elevation will be one foot lower than the existing elevation to accommodate one foot of soil to create a soft bottom intended to support wetland vegetation and benthic invertebrates.‡ • The channel bed would be filled with 340 CY of soil and revegetated. ‡

	Original Plan	Redesign
		‡ The existing Mitigation and Monitoring Plan has wetland vegetation establishment and success criteria applicable to the redesign of the U- frame channel.
2)	Construct headwalls at existing railroad bridge crossing. Heights were not specified.	• Headwall height would be 10 ft tall.
Reach B		
3)	Reduce the floodwall length by 940 ft (from 4,400 to 3,460 linear ft)	• Concrete fill reduced by 643 CY (4,545 CY reduced to 3,902 CY). • Reduction in floodwall footprint from 0.76 acre to 0.60 acre.
4)	Floodwall height above the levee crest (aka ground surface) would range from 2.5 to 6.5 ft.	• Height would range from 5.0 to 9.0 ft on the north (right) bank. • Height would range from 4.5 to 8.5 ft on the south (left) bank. • The section of floodwall that would be greater than 6.5 ft is upstream of N. Milpitas Road for 270 linear ft on the north (right) bank, and 300 linear ft on the south (left) bank. (Renderings of the 9.0 ft tall floodwall at Jacklin Court (north bank) are included in this report.)
5)	Headwall heights at N. Milpitas Boulevard and Arizona Avenue bridge crossings would be increased from existing heights, but the increase in height was not specified.	• N. Milpitas Boulevard headwalls: ○ The upstream headwall would be 9.3 ft tall (increased height of 6.7 ft). ○ The downstream headwall would be 6.7 ft tall (increased height of 5.7 feet). • Arizona Avenue bridge headwalls: ○ The upstream headwall would be 6.5 ft tall (increased height of 5.4 ft). ○ The downstream headwall would be 6.2 ft tall (increased height of 4.9 feet).
6)	Replace about 1,500 square ft (ft^2) of sacked concrete with 1,500 ft^2 of one-quarter ton rock riprap to prevent erosion at N. Milpitas culvert.	• Replace sacked concrete at both N. Milpitas Boulevard and Arizona Avenue culverts. • About 3,500 ft^2 rock riprap fill would replace about 3,600 ft^2 sacked concrete.

Rendering 1, Lower Calera Creek Element: Proposed floodwall viewed from Jacklin Court, Milpitas

Rendering 2, Lower Calera Creek Element: Proposed floodwall viewed from Jacklin Court, Milpitas